

(19) European Patent Office

(11) EP 0 995 718 A1

(12) **EUROPEAN PATENT APPLICATION**

(43) Date published: (51) Intern. Class: <sup>7</sup> **CO1B 33/18**, C01B 13/20  
**04.26.2000, Official Gazette 2000/17** B01J 19/24, B01J 19/26

B01J 12/02, D21H 17/69

(21) Application Number: 99118228.8

(22) Application Filing Date: 09.14.1999

---

(84) Known Contracting Countries:  
AT BE CH CY DE DK ES FI FR  
GB GR IE IT LI LU MC NL  
PT SE  
Known Extension Countries:  
AL LT LV MK RO SI

(72) Inventors:  
Dr. Helmut Mangold  
63517 Rodenbach (DE)  
Mitsuro Ochiai  
Hasuda City, Saitama 349-01 (JP)  
Dr. Holger Glaum  
63477 Maintal-Wachenbuchen (DE)  
Astrid Müller  
63776 Mömbris (DE)

(30) Priority Date: 10.14.1998  
DE 1984 7161

(71) Applicant:

Degussa-Hüls Aktiengesellschaft  
60287 Frankfurt am Main (DE)

---

## **Aerosol-Doped, Pyrogenically Manufactured Silicon Dioxide**

(57) Aerosol-doped, pyrogenically manufactured silicon dioxide is produced by incorporating a watery aerosol of an aluminum salt in the reaction during the flame hydrolysis process.

The silicon dioxide, which is doped with  $\text{Al}_2\text{O}_3$  by means of aerosol, can be used among other things for the manufacture of inkjet paper.

Key for Figure 1:

- 1 aerosol generator
- 2 heater
- 3 axial-flow tube with aerosol
- 4 burner chamber
- 5 jet
- 6 flame tube
- 7 cooling water
- 8 burner
- 9 secondary air
- 10 central tube with air +  $\text{H}_2$  +  $\text{SiCl}_4$
- 11 annular die with secondary  $\text{H}_2$
- 12 salt solution
- 13 carrier gas